

08123950 E. V. Spence Reservoir near Robert Lee, TX

Upper Colorado Basin
Upper Colorado Subbasin

LOCATION.--Lat 31°52'46", long 100°31'01" referenced to North American Datum of 1927, Coke County, TX, Hydrologic Unit 12080008, in outlet works of Robert Lee Dam on the Colorado River, 2.2 mi west of Robert Lee, and at mile 716.0.

DRAINAGE AREA.--15,278 mi² of which 10,260 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.—Dec. 1968 to Sept. 2003, Oct. 2003 to Sept. 2004 (elevation), Oct. 2004 to current year.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Nov. 1969 to Aug. 1988.

BIOCHEMICAL DATA: Nov. 1969 to Aug. 1988.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to June 24, 1969, nonrecording gage at same site and datum. Satellite telemeter at station.

COOPERATION.--Records of diversions can be obtained from the city of San Angelo and from the Colorado River Municipal Water District.

REMARKS.--Records good. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically. The reservoir is formed by a rolled earthfill dam 21,500 ft long. Closure was made Dec. 30, 1968, and dam was completed in June 1969. The dam is the property of the Colorado River Municipal Water District, which has a permit to divert 50,000 acre-ft annually for municipal, mining, and industrial uses. Inflow into the reservoir is partially regulated by Lake J.B. Thomas (station 08118000), Lake Colorado City (station 08123000), and Champion Creek Reservoir (station 08123600). There are two spillways: The controlled service spillway is a morning-glory type that is partially controlled by 12 lift gates, 14.48 by 22.0 ft, and discharges through a 28.0 ft diameter concrete conduit. The uncontrolled spillway is a 3,200 ft wide cut through natural ground near the right end of dam. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	1,928.00
Crest of spillway.....	1,908.00
Top of gates.....	1,900.00
Crest of spillway.....	1,878.00
Lowest gated outlet (invert).....	1,815.85

EXTREMES FOR PERIOD OF RECORD.—Dec. 1968 to Sept. 2003, Oct. 2004 to current year: Maximum contents, 355,300 acre-ft, June 16, 1987; minimum contents after initial filling, 31,640 acre-ft, June 1, 2003; Dec. 1968 to current year: Maximum elevation, 1,887.03 ft, June 16, 1987; minimum elevation, 1,832.67 ft, June 1, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 82,870 acre-ft, Oct. 1, gage height, 1,850.97 ft; minimum contents, 60,780 acre-ft, Sept. 30, gage height, 1,845.69 ft.

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RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	82,840	78,690	76,610	75,490	73,710	71,800	71,350	69,500	68,030	67,050	63,470	63,910
2	82,740	78,580	76,610	75,410	73,640	71,760	71,220	69,380	67,880	66,950	63,380	63,800
3	82,700	78,510	76,450	75,320	73,600	71,980	71,190	69,240	67,760	66,850	63,220	63,610
4	82,620	78,430	76,420	75,290	73,560	71,850	71,170	69,110	67,640	66,770	63,080	63,410
5	82,500	78,380	76,390	75,260	73,530	71,760	71,040	69,040	e67,580	66,660	62,920	63,250
6	82,360	78,180	76,320	75,180	73,400	71,720	70,950	69,000	e67,510	66,480	62,780	63,100
7	82,200	78,050	76,310	75,140	73,340	71,670	70,870	69,030	67,350	66,330	62,640	62,930
8	82,100	77,990	76,240	75,120	73,240	71,540	70,810	68,770	67,200	66,270	62,460	62,770
9	81,970	77,910	76,200	75,040	73,160	71,460	70,690	68,620	67,090	66,300	62,250	62,800
10	81,850	77,820	76,130	74,990	73,080	71,430	70,960	68,540	66,970	66,210	62,110	62,910
11	81,720	77,750	76,200	74,920	73,050	71,380	70,700	68,380	66,790	66,080	63,200	63,090
12	81,590	77,690	76,190	74,670	73,020	71,340	70,620	68,210	66,640	65,980	63,290	63,070
13	81,430	77,620	76,130	74,800	72,910	71,310	70,490	68,160	66,520	65,890	63,170	63,050
14	81,300	77,550	76,080	74,730	72,820	e70,790	70,370	68,150	66,420	65,750	63,040	62,900
15	81,180	77,370	76,120	74,680	72,760	71,110	70,320	68,100	66,300	65,600	62,910	62,710
16	81,010	77,280	75,970	74,650	72,100	71,000	70,330	68,010	66,150	65,410	62,820	62,580
17	80,900	77,210	75,900	74,570	72,030	71,010	e70,300	67,940	66,010	65,290	62,880	62,470
18	80,740	77,150	75,890	74,460	72,630	71,620	70,260	67,840	66,390	65,160	63,030	62,370
19	80,540	77,090	75,860	74,400	72,550	71,850	70,120	67,730	66,390	65,020	63,270	62,250
20	80,380	77,070	75,850	74,280	72,530	71,760	70,040	67,610	66,610	64,870	63,900	62,080
21	80,270	77,010	75,790	74,210	72,490	71,710	69,980	67,470	66,560	64,740	64,200	61,950
22	80,170	76,810	e75,620	74,190	e71,650	71,660	69,940	67,290	66,700	64,600	64,290	61,860
23	79,870	76,640	75,540	74,130	e71,600	71,820	69,840	67,130	67,030	64,470	64,300	61,740
24	79,640	76,640	75,500	74,070	e71,600	71,780	69,770	67,060	67,280	64,300	64,300	61,650
25	79,470	76,840	75,370	74,060	72,310	71,720	69,710	66,990	67,350	64,140	64,280	61,460
26	79,330	76,790	75,500	74,040	72,150	71,680	69,560	66,830	67,140	64,010	64,210	61,310
27	79,210	76,730	75,740	73,980	72,040	71,660	69,740	66,790	67,140	63,850	64,070	61,200
28	79,110	76,710	75,730	73,950	71,940	71,550	69,720	68,250	67,120	63,670	63,940	61,100
29	79,000	76,630	75,650	73,470	71,860	71,460	69,620	68,320	67,180	63,530	63,900	60,990
30	78,900	76,600	75,630	73,820	---	71,430	69,540	68,280	67,110	63,650	64,040	60,860
31	78,830	---	75,570	73,320	---	e71,200	---	68,150	---	63,580	63,970	---
Mean	80,920	77,460	75,980	74,570	72,700	71,540	70,370	68,160	66,990	65,340	63,400	62,440
Max	82,840	78,690	76,610	75,490	73,710	71,980	71,350	69,500	68,030	67,050	64,300	63,910
Min	78,830	76,600	75,370	73,320	71,600	70,790	69,540	66,790	66,010	63,530	62,110	60,860

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